AMENDMENTS TO THE CLAIMS

1. (original) A method for identifying a specific communications protocol used in a vehicle's on-board diagnostic system, wherein the method is implemented using a handheld automotive diagnostic device and cable having a first and second connector, wherein the cable has unique physical layer features that may be correlated to a specific communications protocol, the method comprising:

connecting the first connector to an input/output connector on the diagnostic device;

powering up and initializing the diagnostic device;

retrieving cable identification data unique to the physical layer features of the cable; and

comparing the retrieved cable identification data with at least one look-up table to identify a correlated communications protocol.

2. (original) The method according to Claim 1, wherein the retrieved cable identification data is indicative of the type of connector used as the second connector.

3. (original) The method according to Claim 1, wherein the retrieved cable identification data is indicative of the second connector's connectivity configuration.

4. (original) The method according to Claim 1, wherein the retrieved cable identification data is indicative of the second connector's pin configuration.

5. (original) The method according to Claim 1, wherein the retrieved cable identification data correlates to the second connector's unique physical layer features.

6. (original) The method according to Claim 1, wherein the retrieved cable identification data is indicative of the first connector's connectivity configuration.

7. (original) The method according to Claim 1, wherein the retrieved cable identification data is indicative of the first connector's pin configuration.

8. (original) The method according to Claim 7, wherein the first connector includes a specific pair of jumped pins that may be correlated to a specific communications protocol.

9. (original) The method according to Claim 8, further comprising performing a continuity test to identify whether continuity exists between the specific pair of jumped pins.

10. (original) The method according to Claim 1, further comprising determining from the retrieved cable identification data whether the second connector is a standardized OBD-II connector.

11. (original) The method according to Claim 1, wherein the second connector may be disconnected from the vehicle when the method is performed.

12. (original) The method according to Claim 1, further comprising connecting the second connector to the vehicle connector.

13. (original) The method according to Claim 12, wherein if a standardized OBD-II connector is detected, the communications protocol may be determined through a polling technique.

14. (currently amended) The method according to Claim ~~11~~ 13, wherein the polling technique comprises initializing a plurality of OBD-II compatible communication protocols in a serial manner until successful communication is established with the vehicle's on-board diagnostic system.

15. (original) The method according to Claim 14, wherein the plurality of communication protocols includes at least one of ISO9141, J1850 VPW, J1850 PWM, Keyword 2000, and CAN

16. (currently amended) A universal handheld automotive diagnostic device compatible with OBD-I and OBD-II on-board diagnostics systems, said device also compatible with a plurality of communications protocols supported by OBD-I and OBD-II, said device comprising:

a central processing unit;

memory;

a display;

a keypad;

an input/output connector;

and a sequencer comprising,

a look up table selectively accessed for identifying OBD-I functionality; and

a look up table selectively accessed for identifying OBD-II functionality; and

a look up table selectively accessed for a plurality of OBD-I communications protocols; and

a look up table selectively accessed for a plurality of OBD-II communications protocols.

~~and computer readable mediums comprising,~~

~~a source code segment providing OBD-I functionality;~~

~~a source code segment providing OBD-II functionality;~~

~~source code segments providing functionality for a plurality of OBD-I communications protocols; and~~

~~source codes segments providing functionality for a plurality of OBD-II communications protocols.~~

17. (original) The device according to Claim 16, said plurality of OBD-I communications protocols comprising at least one of GM, Ford, and Chrysler OBD-I communications protocol.

18. (original) The device according to Claim 16, said plurality of OBD-II communications protocols comprising at least one of ISO9141, J1850 VPW, J1850 PWM, Keyword 2000, and CAN.

19. (original) The device according to Claim 16, further comprising a cable identification sequencer.

20. (original) The device according to Claim 16, further comprising an OBD-I cable identification look-up table.

21. (original) The device according to Claim 16, further comprising an OBD-II unique cable identification look-up table.

22. (original) The device according to Claim 16, further comprising an OBD-II polling sequencer.

23. (original) The device according to Claim 16, further comprising a continuity test sequencer.